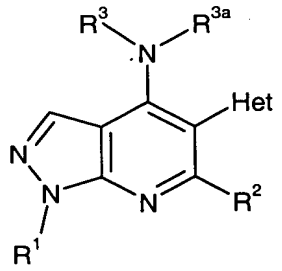
Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

CLAIMS

1. (original) A compound of formula (I) or a salt thereof:



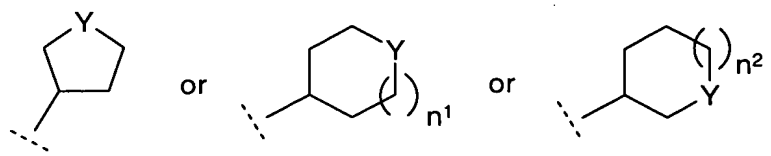
(I)

wherein:

R^1 is C_{1-4}alkyl, C_{1-3}fluoroalkyl or $-(CH_2)_2OH$;

R^2 is a hydrogen atom (H), methyl or C_1fluoroalkyl;

R^3 is optionally substituted branched C_{3-6}alkyl, optionally substituted C_{3-8}cycloalkyl, optionally substituted mono-unsaturated-C_{5-7}cycloalkenyl, optionally substituted phenyl, or an optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc):



(aa) (bb) (cc)

in which n^1 and n^2 independently are 1 or 2; and Y is O, S, SO_2, or NR^4; where R^4 is a hydrogen atom (H), C_{1-2}alkyl, C_{1-2}fluoroalkyl, $CH_2C(O)NH_2$, $C(O)NH_2$, $C(O)$-C_{1-2}alkyl, or $C(O)$-C_1fluoroalkyl;

wherein in R^3 the optionally substituted branched C_{3-6}alkyl is optionally substituted with one or two substituents being oxo (=O), OH, C_{1-2}alkoxy or C_{1-2}fluoroalkoxy; and wherein any such substituent is not substituted at the R^3 carbon atom attached (bonded) to the -NH- group of formula (I);

wherein in R^3 the phenyl is optionally substituted with one substituent being fluoro, chloro, C_{1-2}alkyl, C_{1-2}fluoroalkyl, C_{1-2}alkoxy, C_{1-2}fluoroalkoxy or cyano, or with two or three fluoro substituents;

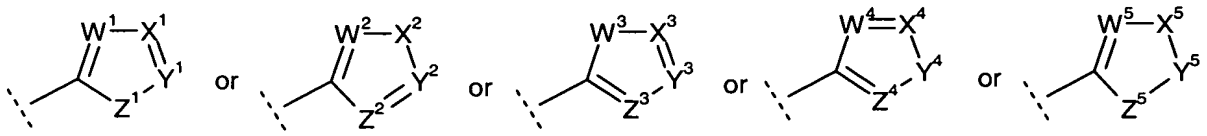
wherein in R^3 the C_{3-8}cycloalkyl or the heterocyclic group of sub-formula (aa), (bb) or (cc) is optionally substituted with one or two substituents independently being oxo (=O); OH; C_{1-2}alkoxy; C_{1-2}fluoroalkoxy; NHR^{21} wherein R^{21} is a hydrogen atom (H) or C_{1-4} straight-chain alkyl; C_{1-2}alkyl; C_{1-2}fluoroalkyl; $-CH_2OH$; $-CH_2CH_2OH$; $-CH_2NHR^{22}$ wherein R^{22} is H or C_{1-2}alkyl; $-C(O)OR^{23}$ wherein R^{23} is H or C_{1-2}alkyl; $-C(O)NHR^{24}$ wherein R^{24} is H or C_{1-2}alkyl; $-C(O)R^{25}$ wherein R^{25} is C_{1-2}alkyl; fluoro; hydroxyimino (=N-OH); or (C_{1-4}alkoxy)imino (=N-OR^{26} where R^{26} is C_{1-4}alkyl); and wherein any OH, alkoxy, fluoroalkoxy or NHR^{21} substituent is not substituted at the R^3 ring carbon attached (bonded) to the -NH- group of formula (I) and is not substituted at either R^3 ring carbon bonded to the Y group of the heterocyclic group (aa), (bb) or (cc);

and wherein, when R^3 is optionally substituted mono-unsaturated-C_{5-7}cycloalkenyl, then the cycloalkenyl is optionally substituted with one or two substituents independently being fluoro or C_{1-2}alkyl provided that if there are two substituents then they are not both C_2alkyl, and the R^3 ring carbon bonded to the -NH- group of formula (I) does not partake in the cycloalkenyl double bond;

and R^{3a} is a hydrogen atom (H) or straight-chain C_{1-3}alkyl;

provided that when R^{3a} is C_{1-3}alkyl then R^3 is tetrahydro-2H-pyran-4-yl, cyclohexyl (i.e. unsubstituted), 3-hydroxy-cyclohexyl, 4-oxo-cyclohexyl or 4-(hydroxyimino)cyclohexyl;

and wherein Het is of sub-formula (i), (ii), (iii), (iv) or (v):



(i) (ii) (iii) (iv) (v)

wherein:

W^1, W^2, W^4 and W^5 is N; and W^3 is NR^W ;

X^1, X^3 and X^4 is N or CR^X; X^2 is O, S or NR^X ; and X^5 is $CR^{X1}R^{X2}$ or $CR^{X3}R^{X4}$;

Y^1, Y^2 and Y^3 is CR^Y or N; Y^4 is O, S or NR^Y ; and Y^5 is $CR^{Y1}R^{Y2}$;

Z^1 and Z^5 is O, S or NR^Z; and Z^2, Z^3 and Z^4 is N or CR^Z;

wherein:

R^W is a hydrogen atom (H) or C_{1-2}alkyl;

R^X, R^{X2}, R^Y and R^{Y2} independently are:

a hydrogen atom (H);

C_{1-8}alkyl;

C_{3-6}cycloalkyl optionally substituted by one or two C_{1-2}alkyl groups and/or by one oxo (=O) group;

$-(CH_2)_n{}^{2a}-C_{3-6}$cycloalkyl optionally substituted, in the $-(CH_2)_n{}^{2a}-$ moiety or in the C_{3-6}cycloalkyl moiety, by a C_{1-2}alkyl group, or optionally substituted in the C_{3-6}cycloalkyl moiety by a $-CH_2C(O)NHC_{1-2}$alkyl group, wherein n^{2a} is 1, 2 or 3;

$-(CH_2)_n{}^{3}-S(O)_2-R^5$, $-CH(C_{1-2}alkyl)-S(O)_2-R^5$, $-CMe_2-S(O)_2-R^5$, or C_{3-5}cycloalkyl substituted at the connecting carbon atom by $-S(O)_2-R^5$, wherein n^3 is 1 or 2;

and R^5 is C_{1-4}alkyl, $-NR^{15}R^{16}$, phenyl, carbon-linked-pyridinyl or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy, C_1fluoroalkoxy or OH, and wherein the pyridinyl is optionally substituted by one methyl, methoxy or OH (including any tautomer thereof));

wherein R^{15} is H, C_{1-4}alkyl, phenyl, benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy), CH(Me)Ph, or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

and R^{16} is H or C_{1-2}alkyl;

or wherein R^{15} and R^{16} together are $-(CH_2)_n{}^{3a}-X^{3a}-(CH_2)_n{}^{3b}-$ in which n^{3a} and n^{3b} independently are 2 or 3 and X^{3a} is a bond, $-CH_2-$, O, or NR^{8a} wherein R^{8a} is H or C_{1-2}alkyl, acetyl, $-S(O)_2Me$ or phenyl, and wherein the ring formed by $NR^{15}R^{16}$ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

$-(CH_2)_n{}^{4}-NR^6R^7$, $-CH(C_{1-2}alkyl)-NR^6R^7$, $-CMe_2-NR^6R^7$, or C_{3-5}cycloalkyl substituted at the connecting carbon atom by $-NR^6R^7$, wherein n^4 is 0, 1, 2 or 3;

and R^6 and R^7 independently are H, C_{1-6}alkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, $-C(O)R^{17}$, $-S(O)_2R^{18}$, phenyl, benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro,

C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy), or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

and wherein R^{17} and R^{18} independently are C_{1-6}alkyl, C_{3-6}cycloalkyl, optionally substituted 5-membered heteroaryl being furyl (furanyl) or 1,3-oxazolyl or isoxazolyl or oxadiazolyl or thienyl or 1,3-thiazolyl or isothiazolyl or pyrrolyl or imidazolyl or pyrazolyl (all independently optionally substituted by one oxo and/or one or two methyl), or phenyl or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy, C_1fluoroalkoxy or OH), or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

or R^6 and R^7 together are $-(CH_2)_n{}^5-X^5-(CH_2)_n{}^6-$ in which n^5 and n^6 independently are 2 or 3 and X^5 is a bond, $-CH_2-$, O, or NR^8 wherein R^8 is H, C_{1-2}alkyl, acetyl, $-S(O)_2Me$ or phenyl, and wherein the ring formed by NR^6R^7 is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

$-(CH_2)_n{}^7-O-R^9$; wherein n^7 is 0, 1, 2 or 3 and R^9 is H, C_{1-6}alkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, $-C(O)R^{17}$, phenyl, or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy); wherein n^7 is 0 only when the $-(CH_2)_n{}^7-O-R^9$ is bonded to a carbon atom in the Het ring; and wherein n^7 is not 0 when Het is of sub-formula (v) (i.e. n^7 is not 0 for R^{X2} and for R^{Y2});

$-(CH_2)_n{}^{11}-C(O)-NR^{10}R^{11}$, $-CH(C_{1-2}alkyl)-C(O)-NR^{10}R^{11}$, $-CMe_2-C(O)-NR^{10}R^{11}$, or C_{3-5}cycloalkyl substituted at the connecting carbon atom by $-C(O)-NR^{10}R^{11}$, wherein n^{11} is 0, 1 or 2;

and wherein R^{10} and R^{11} independently are H; C_{1-6}alkyl; C_{1-4}fluoroalkyl; C_{2-4}alkyl substituted by one OH or $-OC_{1-2}$alkyl other than at the connection point; C_{3-6}cycloalkyl optionally substituted by one

or two methyl groups; -CH_2-C_{3-6}cycloalkyl optionally substituted by one methyl, NH_2 or NHMe group; -$(CH_2)_n{}^{17}$-Het^2; carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof); phenyl; benzyl; or -CH(C_{1-2}alkyl)Ph [wherein the phenyl, benzyl and -CH(C_{1-2}alkyl)Ph are independently optionally substituted on the aromatic ring by one or two substituents independently being: fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy, C_1fluoroalkoxy, OH, -$NR^{10a}R^{10b}$ (wherein R^{10a} is H or C_{1-2}alkyl and R^{10b} is H, C_{1-2}alkyl, -C(O)-C_{1-2}alkyl or -$S(O)_2$-C_{1-2}alkyl), -C(O)-$NR^{10c}R^{10d}$ (wherein R^{10c} and R^{10d} independently are H or C_{1-2}alkyl), or -$S(O)_2$-R^{10e} (wherein R^{10e} is C_{1-2}alkyl, NH_2, NHMe or NMe_2)];

wherein n^{17} is 0, 1 or 2 and wherein Het^2 is a 4-, 5- or 6- membered saturated heterocyclic ring containing one O or S ring atom or one NR^{27} ring group wherein R^{27} is H, C_{1-2}alkyl, -C(O)Me, or -$S(O)_2$Me, wherein the Het^2 ring is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

and wherein when n^{17} is 2 then the Het^2 ring can optionally contain one additional ring N atom at the Het^2 ring position bonded to the -$(CH_2)_n{}^{17}$- moiety; provided that, when Het^2 contains one O or S or NR^{27} ring atom/group and one additional ring N atom, then the O/S/NR^{27} ring atom/group and the one additional ring N atom are not directly bonded to each other, and are separated by more than one carbon atom;

or R^{10} and R^{11} together are -$(CH_2)_n{}^8$-X^6-$(CH_2)_n{}^9$- in which n^8 and n^9 independently are 2 or 3 and X^6 is a bond, -CH_2-, O, or NR^{12} wherein R^{12} is H, C_{1-2}alkyl, acetyl, -$S(O)_2$Me or phenyl, and wherein the ring formed by $NR^{10}R^{11}$ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

-$(CH_2)_n{}^{12}$-C(O)-OR^{13} wherein n^{12} is 0, 1 or 2; and wherein R^{13} is H, C_{1-6}alkyl, C_{3-6}cycloalkyl, -CH_2-C_{3-6}cycloalkyl, phenyl, or benzyl (wherein the phenyl and benzyl are independently optionally substituted on

the aromatic ring by one or two of (independently) fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy);

$-(CH_2)_n{}^{13}$-C(O)-R^{13a} wherein n^{13} is 0, 1 or 2; and wherein R^{13a} is a hydrogen atom (H), C_{1-6}alkyl, C_{1-2}fluoroalkyl, C_{3-6}cycloalkyl, $-CH_2$-C_{3-6}cycloalkyl, benzyl, or phenyl; wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of (independently) fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy;

$-(CH_2)_n{}^{14}$-Het^1, –CH(C_{1-2}alkyl)-Het^1, $-CMe_2$-Het^1, or C_{3-5}cycloalkyl substituted at the connecting carbon atom by Het^1, wherein n^{14} is 0, 1 or 2 and wherein Het^1 is a 4-, 5-, 6- or 7-membered saturated heterocyclic ring;

wherein said heterocyclic ring Het^1 contains one O or S ring atom and/or one NR^{14} ring group wherein R^{14} is H, C_{1-4}alkyl, C_{3-6}cycloalkyl, benzyl, phenyl, -C(O)R^{19}, or $-S(O)_2R^{19}$;

wherein R^{19}, independent of any other R^{19}, is C_{1-6}alkyl, C_{3-6}cycloalkyl, thienyl, furyl (furanyl), or phenyl or benzyl; wherein the phenyl and benzyl are independently optionally substituted by one or two of (independently) fluoro, methyl or methoxy;

and wherein said heterocyclic ring Het^1 is optionally substituted (at a position or positions other than any NR^{14} position) by one or two oxo (=O) and/or one C_{1-4}alkyl substituents;

provided that, when the heterocyclic ring Het^1 contains one O or S ring atom and one NR^{14} ring group then: (a) the O/S ring atom and the NR^{14} ring group are not directly bonded to each other, and (b) the O/S ring atom and the NR^{14} ring group are separated by more than one carbon atom unless Het^1 contains an $-NR^{14}$-C(O)-O- or $-NR^{14}$-C(O)-S- moiety as part of the ring; or

$-(CH_2)_n{}^{10}$-Ar, -CH(C_{1-2}alkyl)-Ar, $-CMe_2$-Ar, or C_{3-5}cycloalkyl substituted at the connecting carbon atom by Ar, wherein n^{10} is 0, 1 or 2 and

(i) Ar is phenyl optionally substituted by one or two substituents independently being fluoro, chloro, bromo, C_{1-2}alkyl, C_{1-2}fluoroalkyl, C_{1-2}alkoxy, C_{1-2}fluoroalkoxy, OH, $-NR^{11a}R^{11b}$ (wherein R^{11a} is H or

C_{1-2}alkyl and R^{11b} is H, C_{1-2}alkyl, -C(O)-C_{1-2}alkyl or -$S(O)_2$-C_{1-2}alkyl), cyano, -C(O)-$NR^{11c}R^{11d}$ (wherein R^{11c} and R^{11d} independently are H or C_{1-2}alkyl), -C(O)-OR^{11e} wherein R^{11e} is H or C_{1-2}alkyl, or -$S(O)_2$-R^{11f} (wherein R^{11f} is C_{1-2}alkyl, NH_2, NHMe or NMe_2); or the phenyl Ar is optionally substituted at two adjacent Ar ring atoms by the two ends of a chain which is: -$(CH_2)_4$-, -$(CH_2)_3$-, or -CH=CH-CH=CH-; or

(ii) Ar is an optionally substituted 5- or 6-membered heterocyclic aromatic ring containing 1, 2, 3 or 4 heteroatoms selected from O, N or S; and wherein when the heterocyclic aromatic ring Ar contains 2, 3 or 4 heteroatoms, one is selected from O, N and S and the remaining heteroatom(s) are N; and wherein the heterocyclic aromatic ring Ar is optionally substituted by one or two groups independently being C_{1-4}alkyl or OH (including any keto tautomer of an OH-substituted aromatic ring), or the heterocyclic aromatic ring Ar is optionally substituted at two adjacent Ar ring atoms by the two ends of a chain which is: -$(CH_2)_4$-, -$(CH_2)_3$-, or -CH=CH-CH=CH-;

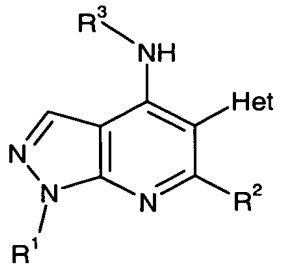
R^{X1} and R^{Y1} independently are a hydrogen atom (H), C_{1-2}alkyl or C_1fluoroalkyl;

R^{X3} and R^{X4} together are -$(CH_2)_{n^{15}}$-X^7-$(CH_2)_{n^{16}}$- wherein n^{15} and n^{16} independently are 1 or 2 and X^7 is a bond, -CH_2-, O, or NR^{X5} wherein R^{X5} is H, C_{1-2}alkyl, acetyl or -$S(O)_2$Me; and

R^Z is a hydrogen atom (H) or C_{1-2}alkyl,

provided that:
when R^3 is the heterocyclic group of sub-formula (bb), n^1 is 1, and Y is NR^4, then R^4 is not C_{1-2}alkyl, C_{1-2}fluoroalkyl or $CH_2C(O)NH_2$.

2. (original) A compound of formula (IA) or a salt thereof:



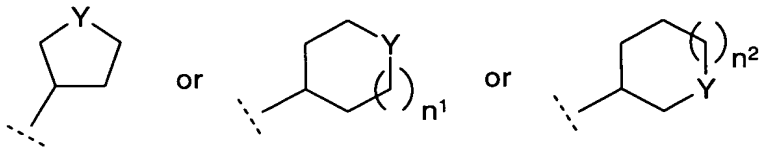
(IA)

wherein:

R^1 is C_{1-4}alkyl, C_{1-3}fluoroalkyl or -$(CH_2)_2OH$;

R^2 is a hydrogen atom (H), methyl or C_1fluoroalkyl;

R^3 is optionally substituted branched C_{3-6}alkyl, optionally substituted C_{3-8}cycloalkyl, optionally substituted phenyl, or an optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc):



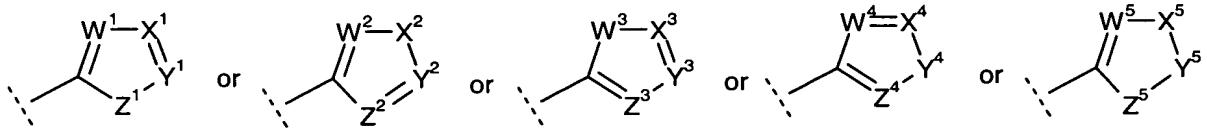
(aa) (bb) (cc)

in which n^1 and n^2 independently are 1 or 2; and Y is O, S, SO_2, or NR^4; where R^4 is a hydrogen atom (H), C_{1-2}alkyl, C_{1-2}fluoroalkyl, $CH_2C(O)NH_2$, $C(O)NH_2$, C(O)-C_{1-2}alkyl, or C(O)-C_1fluoroalkyl;
wherein in R^3 the optionally substituted branched C_{3-6}alkyl is optionally substituted with one or two substituents being oxo (=O), OH, C_{1-2}alkoxy or C_{1-2}fluoroalkoxy; and wherein any such substituent is not substituted at the R^3 carbon atom attached (bonded) to the -NH- group of formula (IA);

wherein in R^3 the phenyl is optionally substituted with one substituent being fluoro, chloro, C_{1-2}alkyl, C_{1-2}fluoroalkyl, C_{1-2}alkoxy, C_{1-2}fluoroalkoxy or cyano;

wherein in R^3 the C_{3-8}cycloalkyl or the heterocyclic group of sub-formula (aa), (bb) or (cc) is optionally substituted with one or two substituents being oxo (=O), OH, C_{1-2}alkoxy, C_{1-2}fluoroalkoxy, or C_{1-2}alkyl; and wherein any OH, alkoxy or fluoroalkoxy substituent is not substituted at the R^3 ring carbon attached (bonded) to the -NH- group of formula (IA) and is not substituted at either R^3 ring carbon bonded to the Y group of the heterocyclic group (aa), (bb) or (cc);

and wherein Het is of sub-formula (i), (ii), (iii), (iv) or (v):



(i) (ii) (iii) (iv) (v)

wherein:
W^1, W^2, W^4 and W^5 is N; and W^3 is NR^W ;

X^1, X^3 and X^4 is N or CR^X; X^2 is O, S or NR^X ; and X^5 is $CR^{X1}R^{X2}$;

Y^1, Y^2 and Y^3 is CR^Y or N; Y^4 is O, S or NR^Y ; and Y^5 is $CR^{Y1}R^{Y2}$;

Z^1 and Z^5 is O, S or NR^Z; and Z^2, Z^3 and Z^4 is N or CR^Z;

wherein:
R^W is a hydrogen atom (H) or C_{1-2}alkyl;

R^X, R^{X2}, R^Y and R^{Y2} independently are:

a hydrogen atom (H);

C_{1-8}alkyl;

C_{3-6}cycloalkyl optionally substituted by a C_{1-2}alkyl group;

$-(CH_2)_n^{2a}-C_{3-6}$cycloalkyl optionally substituted, in the $-(CH_2)_n^{2a}-$ moiety or in the C_{3-6}cycloalkyl moiety, by a C_{1-2}alkyl group, wherein n^{2a} is 1, 2 or 3;

$-(CH_2)_n^3-SO_2-R^5$ wherein n^3 is 1 or 2 and R^5 is C_{1-3}alkyl or $-NH-C_{1-2}$alkyl or phenyl;

$-(CH_2)_n^4-NR^6R^7$ wherein n^4 is 0, 1, 2 or 3, and R^6 and R^7 independently are H, C_{1-6}alkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, $-C(O)-C_{1-2}$alkyl, $-SO_2-C_{1-2}$alkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy); or R^6 and R^7 together are $-(CH_2)_n^5-X^5-(CH_2)_n^6-$ in which n^5 and n^6 independently are 2 or 3 and X^5 is a bond, $-CH_2-$, O, or NR^8 wherein R^8 is H or C_{1-2}alkyl;

$-(CH_2)_n^7-O-R^9$; wherein n^7 is 0, 1, 2 or 3 and R^9 is H or C_{1-6}alkyl; wherein n^7 is 0 only when the $-(CH_2)_n^7-O-R^9$ is bonded to a carbon atom in the Het ring; and wherein n^7 is not 0 when Het is of sub-formula (v) (i.e. n^7 is not 0 for R^{X2} and for R^{Y2});

$-C(O)-NR^{10}R^{11}$ wherein R^{10} and R^{11} independently are H, C_{1-6}alkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy); or R^{10} and R^{11} together are $-(CH_2)_n^8-X^6-(CH_2)_n^9-$ in which n^8 and n^9 independently are 2 or 3 and X^6 is a bond, $-CH_2-$, O, or NR^{12} wherein R^{12} is H or C_{1-2}alkyl;

$-C(O)-OR^{13}$ wherein R^{13} is H, C_{1-6}alkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy);

$-C(O)-R^{13a}$ wherein R^{13a} is a hydrogen atom (H), C_{1-6}alkyl, C_{1-2}fluoroalkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, benzyl, or phenyl; wherein the phenyl or benzyl are independently optionally substituted on the aromatic

ring by one of fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy;

a 4-, 5-, 6- or 7-membered saturated heterocyclic ring containing one O ring atom or one NR^{14} ring group wherein R^{14} is H or C_{1-4}alkyl, said heterocyclic ring being optionally substituted (at a position or positions other than any NR^{14} position) by one oxo (=O) and/or one C_{1-4}alkyl substituent; or

$-(CH_2)_n{}^{10}$-Ar wherein n^{10} is 0, 1 or 2 and

(i) Ar is phenyl optionally substituted by one or two substituents being fluoro, chloro, C_{1-2}alkyl, C_{1-2}fluoroalkyl, C_{1-2}alkoxy, C_{1-2}fluoroalkoxy or cyano; or

(ii) Ar is an optionally substituted 5- or 6-membered heterocyclic aromatic ring containing 1, 2 or 3 heteroatoms selected from O, N or S; and wherein when the heterocyclic aromatic ring Ar contains 2 or 3 heteroatoms, one is selected from O, N and S and the remaining heteroatom(s) are N; and wherein the heterocyclic aromatic ring Ar is optionally substituted by one or two C_{1-4}alkyl groups;

R^{X1} and R^{Y1} independently are a hydrogen atom (H), C_{1-2}alkyl or C_1fluoroalkyl; and

R^Z is a hydrogen atom (H) or C_{1-2}alkyl;

provided that, when R^3 is the heterocyclic group of sub-formula (bb), n^1 is 1, and Y is NR^4, then R^4 is not C_{1-2}alkyl, C_{1-2}fluoroalkyl or $CH_2C(O)NH_2$.

3. (original) A compound or salt as claimed in claim 1, wherein R^{3a} is a hydrogen atom (H).

4. (currently amended) A compound or salt as claimed in claim 1 ~~2 or 3~~, wherein R^2 is a hydrogen atom (H) or methyl.

5. (currently amended) A compound or salt as claimed in claim 1 ~~2, 3 or4~~, wherein R^1 is C_{1-3}alkyl, C_{1-2}fluoroalkyl or $-CH_2CH_2OH$.

6. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein R^1 is ethyl, n-propyl, C_2fluoroalkyl or $-CH_2CH_2OH$.

7. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein R^1 is ethyl.

8. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein in R^3 there is one substituent or no substituent.

9. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein, where R^3 is optionally substituted branched ~~C_{3-6} alkyl, then R^3 is isobutyl, secbutyl, t-butyl or 3-methylbutan-2-yl~~ C_{3-6}cycloalkylor the optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc).

10. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 7, wherein, ~~when~~ R^3 is optionally substituted ~~phenyl, then the phenyl is optionally substituted with one substituent being fluoro, C_1alkyl, C_1fluoroalkyl, C_1alkoxy, or C_1fluoroalkoxy~~ C_{3-8}cycloalkyl or the optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc).

11. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, where R^3 is optionally substituted C_{3-8}cycloalkyl, then R^3 is optionally substituted C_{6-8}cycloalkyl.

12. (currently amended) A compound or salt as claimed in claim 11, wherein, where R^3 is optionally substituted C_{3-8}cycloalkyl, then R^3 is optionally substituted cyclohexyl.

13. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, where R^3 is optionally substituted C_{3-8}cycloalkyl, then the one or two optional substituents is or independently are: oxo (=O); OH; NHR^{21} wherein R^{21} is a hydrogen atom (H); methyl; $-CH_2F$; $-CHF_2$; $-C(O)OR^{23}$ wherein R^{23} is H; fluoro; hydroxyimino (=N-OH); or (C_{1-2}alkoxy)imino (=N-OR^{26} where R^{26} is C_{1-2}alkyl).

14. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, where R^3 is optionally substituted C_{3-8}cycloalkyl, then the one or two optional substituents is or independently are OH, oxo (=O) or hydroxyimino (=N-OH).

15. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, where R^3 is optionally substituted C_{3-8}cycloalkyl, then the one or two optional substituents if present is or are substituent(s) at the 3-, 4- or 5- position(s) of the R^3 cycloalkyl ring, (wherein the 1-position of the R^3 cycloalkyl ring is deemed to be the connection point to the -NH- in formula (I)~~) or (IA) or (IB)~~.

16. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, where R^3 is optionally substituted C_6cycloalkyl, then R^3 is cyclohexyl (i.e. unsubstituted), 3-hydroxy-cyclohexyl (i.e. 3-hydroxycyclohexan-1-yl), 4-oxo-cyclohexyl (i.e. 4-oxocyclohexan-1-yl), 4-(hydroxyimino)cyclohexyl (i.e. 4-(hydroxyimino)cyclohexan-1-yl), 4-(C_{1-2}alkoxyimino)cyclohexyl, 1-methylcyclohexyl or 3-methylcyclohexyl.

17. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein, where R^3 is optionally substituted mono-unsaturated-C_{5-7}cycloalkenyl, then R^3 is optionally substituted mono-unsaturated-C_6cycloalkenyl (i.e. optionally substituted mono-unsaturated-cyclohexenyl), and wherein the R^3 cycloalkenyl is optionally substituted with one or two substituents independently being fluoro or methyl.

18. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein R^4 is a hydrogen atom (H) or C(O)-Me.

19. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, where R^3 is the heterocyclic group of sub-formula (aa), (bb) or (cc), then Y is O.

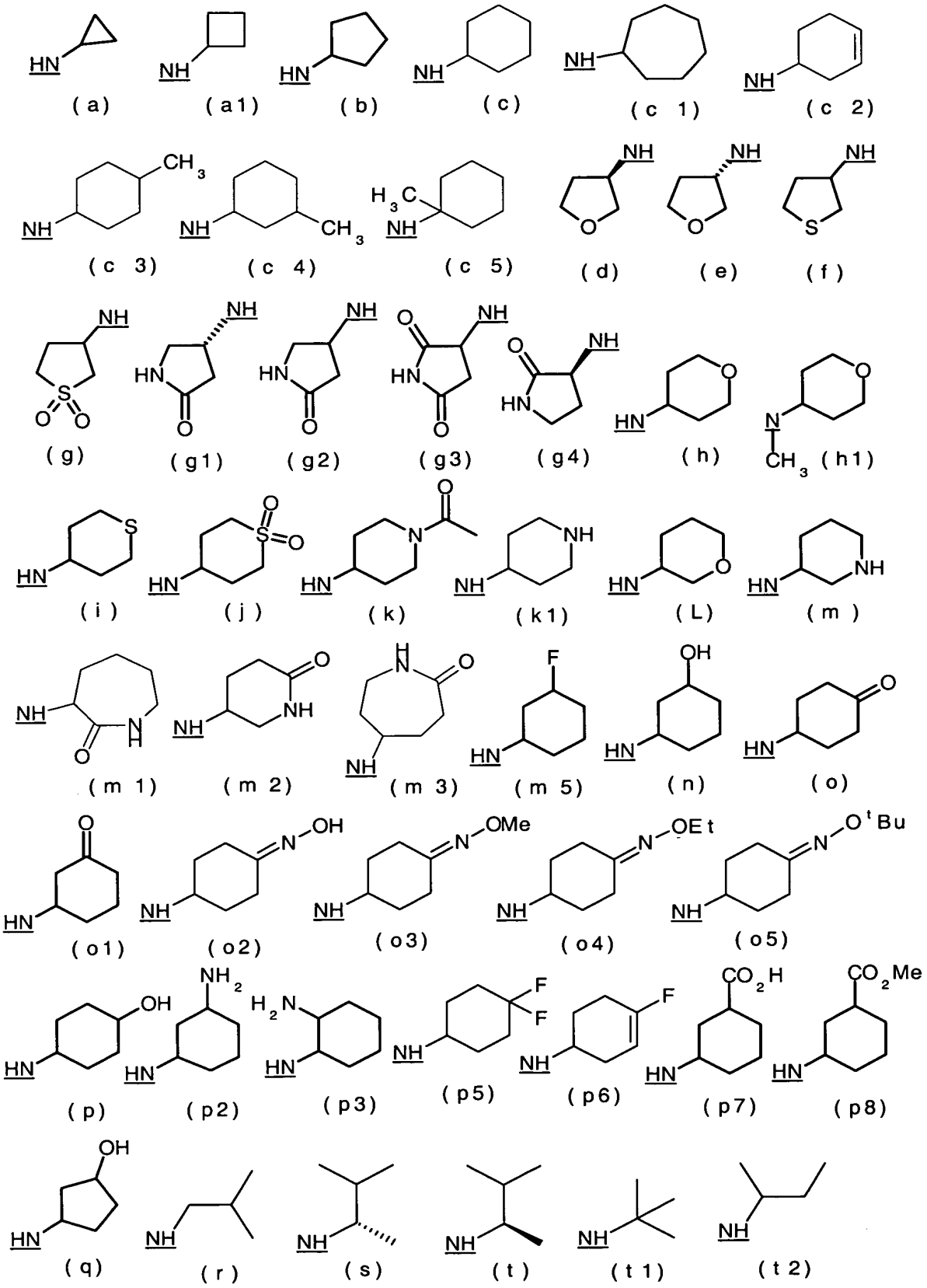
20. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein where R^3 is the heterocyclic group of sub-formula (aa), (bb) or (cc), then R^3 is the heterocyclic group of sub-formula (bb) and n^1 is 1.

21. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein, in R^3, the heterocyclic group of sub-formula (aa), (bb) or (cc) is unsubstituted (wherein, where Y is NR^4, R^4 is not classified as a substituent).

22. (currently amended) A compound or salt as claimed in ~~any of~~ claims ~~1 to 20~~ 9, wherein, in the R^3 heterocyclic group of sub-formula (aa), (bb) or (cc), the one or two optional substituents is or are oxo (=O).

23. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 9, wherein when R^3 is the heterocyclic group of sub-formula (aa), then Y is not NR^4, andwhen R^3 is the heterocyclic group of sub-formula (bb) and Y is NR^4, then R^4 is not $C_{1\text{-}2}$alkyl, $C_{1\text{-}2}$fluoroalkyl or $CH_2C(O)NH_2$.

24. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein ~~NHR^3 or~~ NR^3R^{3a} is of sub-formula (a), (a1), (b), (c), (c 1), (c 2), (c 3), (c 4), (c 5), (d), (e), (f), (g), (g1), (g2), (g3), (g4), (h), (h1), (i), (j), (k), (k1), (L), (m), (m1), (m2), (m3), (m5), (n), (o), (o1), (o2), (o3), (o4), (o5), (p), (p2), (p3), (p5), (p6), (p7), (p8), (q), (r), (s), (t), (t1) or (t2):


(a)
(a1)
(b)
(c)
(c 1)
(c 2)
(c 3)
(c 4)
(c 5)
(d)
(e)
(f)
(g)
(g1)
(g2)
(g3)
(g4)
(h)
(h1)
(i)
(j)
(k)
(k1)
(L)
(m)
(m 1)
(m 2)
(m 3)
(m 5)
(n)
(o)
(o1)
(o2)
(o3)
(o4)
(o5)
(p)
(p2)
(p3)
(p5)
(p6)
(p7)
(p8)
(q)
(r)
(s)
(t)
(t 1)
(t 2)

25. (currently amended) A compound or salt as claimed in claim 24, wherein ~~NHR^3 or~~ NR^3R^{3a} is of sub-formula (c), (c1), (c 4), (c 5), (h), (i), (j), (k), (m1), (m2), (n), (o), (o2), (o3), (p2), (p5), (p6), (r), (s) or (t1).

26. (currently amended) A compound or salt as claimed in claim 24, wherein ~~NHR^3 or~~ NR^3R^{3a} is of sub-formula (c), (h), (k), (n), (o), (o2) or (s).

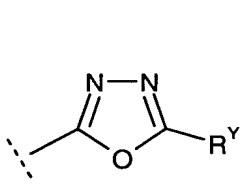
27. (currently amended) A compound or salt as claimed in claim 24, wherein ~~NHR^3 or~~ NR^3R^{3a} is of sub-formula (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (L), (m), (n), (o), (p), (q), (r), (s) or (t).

28. (currently amended) A compound or salt as claimed in claim 24, wherein ~~NHR^3 or~~ R^3 is tetrahydro-2H-pyran-4-yl and R^{3a} is H; that is NR^3R^{3a} is of sub-formula (h).

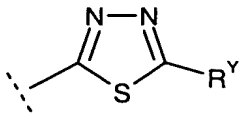
29. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein Het is of sub-formula (i), (ii) or (v).

30. (original) A compound or salt as claimed in claim 29, wherein Z^1 and Z^5 are O.

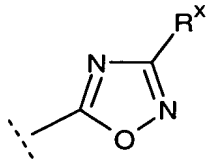
31. (currently amended) A compound or salt as claimed in claim 29 ~~or 30~~, wherein Het is of sub-formula (ia), (ib), (ic), (id), (ie), (if), (ig), (va), (vb) or (iia):



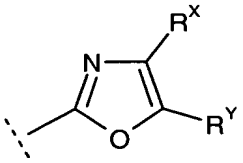
(ia)



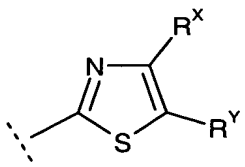
(ib)



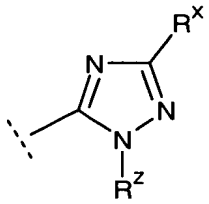
(ic)



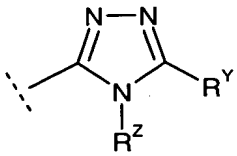
(id)



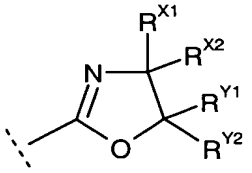
(ie)



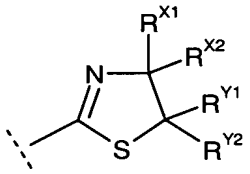
(i f)



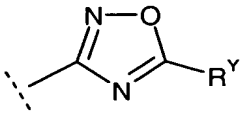
(ig)



(va)



(vb)



(iia)

32. (currently amended) A compound or salt as claimed in claim 31, wherein Het is of sub-formula (ia), (ib), (ic), or (id), ~~(if), (ig), (va), or (iaa)~~.

33. (currently amended) A compound or salt as claimed in claim 31, wherein Het is of sub-formula (ia), (ic), or (id) ~~or (va).~~

34. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein R^W and R^Z are a hydrogen atom (H).

35. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein for the Het group, one of R^X and R^Y (or R^{X2} and R^{Y2}) is as defined herein and the other of R^X and R^Y (or R^{X2} and R^{Y2}) is a hydrogen atom (H).

36. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein R^X, R^{X2}, R^Y and R^{Y2} independently are:

a hydrogen atom (H);

C_{1-8}alkyl;

optionally substituted C_{3-6}cycloalkyl;

optionally substituted $-(CH_2)_n^{2a}-C_{3-6}$cycloalkyl;

$-(CH_2)_n^3-S(O)_2-R^5$, -CH(Me)-$S(O)_2-R^5$, or C_3cycloalkyl substituted at the connecting carbon atom by $-S(O)_2-R^5$;

$-(CH_2)_n^4-NR^6R^7$ or -CH(Me)-NR^6R^7;

$-(CH_2)_n^7-O-R^9$;

$-(CH_2)_n^{11}-C(O)-NR^{10}R^{11}$ or -CH(Me)-$C(O)-NR^{10}R^{11}$;

$-(CH_2)_n^{12}-C(O)-OR^{13}$;

$-(CH_2)_n^{13}-C(O)-R^{13a}$;

$-(CH_2)_n^{14}$-Het^1 or -CH(Me)-Het^1; or

$-(CH_2)_n^{10}$-Ar or -CH(Me)-Ar.

37. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein one of R^X and R^Y, and for Het of sub-formula (v) one of R^{X2} and R^{Y2}, is: $-(CH_2)_n^4-NR^6R^7$, -CH(Me)-NR^6R^7, $-(CH_2)_n^{11}-C(O)-NR^{10}R^{11}$, $-(CH_2)_n^{14}$-Het^1, or $-(CH_2)_n^{10}$-Ar.

38. (currently amended) A compound or salt as claimed in ~~any preceding~~ claim 1, wherein R^X, R^{X2}, R^Y and R^{Y2} independently are:

C_{1-6}alkyl;

optionally substituted C_{3-6}cycloalkyl;

$-(CH_2)_n^{2a}-C_{3-6}$cycloalkyl optionally substituted by a C_{1-2}alkyl group; wherein n^{2a} is 1;

$-(CH_2)_n^3-S(O)_2-R^5$ or C_3cycloalkyl substituted at the connecting carbon atom by $-S(O)_2$-Ph, wherein n^3 is 1 and R^5 is C_{1-4}alkyl, $-NR^{15}R^{16}$, optionally substituted phenyl or optionally substituted benzyl; wherein R^{16} is H or methyl and R^{15} is H, C_{1-4}alkyl or optionally substituted phenyl; or R^{15} and R^{16} together are $-(CH_2)_n^{3a}-X^{3a}-(CH_2)_n^{3b}-$ wherein n^{3a} and n^{3b} are 2 and X^{3a} is a bond, $-CH_2-$, O,

or NR^{8a} wherein R^{8a} is C_{1-2}alkyl or acetyl; and the ring formed by $NR^{15}R^{16}$ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

$-(CH_2)_n{}^4-NR^6R^7$, $-CH(Me)-NR^6R^7$ or $-CMe_2-NR^6R^7$ wherein n^4 is 0 (when the $-(CH_2)_n{}^4-NR^6R^7$ is bonded to a carbon atom in the Het ring) or wherein n^4 is 1; and wherein R^6 is H or C_{1-4}alkyl and R^7 is H, C_{1-4}alkyl, $-C(O)R^{17}$ or $-S(O)_2R^{18}$; or R^6 and R^7 together are $-(CH_2)_n{}^5-X^5-(CH_2)_n{}^6-$ in which n^5 and n^6 are 2 and X^5 is a bond, $-CH_2-$, O, or NR^8, and wherein the ring formed by NR^6R^7 is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

$-(CH_2)_n{}^7-O-R^9$, wherein n^7 is 1 or 2 and R^9 is H, C_{1-4}alkyl or phenyl;

$-(CH_2)_n{}^{11}-C(O)-NR^{10}R^{11}$, $-CH(Me)-C(O)-NR^{10}R^{11}$ or $-CMe_2-C(O)-NR^{10}R^{11}$, wherein n^{11} is 0 or 1,

and R^{10} is H or C_{1-6}alkyl,

and R^{11} is: H; C_{1-6}alkyl; C_{3-6}cycloalkyl optionally substituted by one or two methyl groups; $-CH_2-C_{3-6}$cycloalkyl (unsubstituted); $-(CH_2)_n{}^{17}-Het^2$; optionally substituted carbon-linked-pyridinyl; optionally substituted phenyl, optionally substituted benzyl; or optionally substituted $-CH(C_{1-2}alkyl)Ph$; wherein the phenyl, the benzyl and the $-CH(C_{1-2}alkyl)Ph$ are independently optionally substituted on the aromatic ring by one or two substituents independently being: fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy, C_1fluoroalkoxy, $-NR^{10a}R^{10b}$ (wherein R^{10a} is H or methyl and R^{10b} is H, C_{1-2}alkyl, $-C(O)Me$ or $-S(O)_2Me$), $-C(O)-NR^{10c}R^{10d}$ (wherein R^{10c} and R^{10d} independently are H or C_{1-2}alkyl), or $-S(O)_2-R^{10e}$ (wherein R^{10e} is C_{1-2}alkyl, NH_2, NHMe or NMe_2); and wherein the carbon-linked-pyridinyl is preferably optionally substituted by one OH (including any keto tautomer thereof);

or R^{10} and R^{11} together are $-(CH_2)_n{}^8-X^6-(CH_2)_n{}^9-$ in which n^8 and n^9 are 2 and X^6 is a bond, $-CH_2-$, O, or NR^{12}; , and wherein the ring formed by $NR^{10}R^{11}$ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

$-(CH_2)_n{}^{12}-C(O)-OR^{13}$, wherein n^{12} is 0 or 1, and R^{13} is H or C_{1-4}alkyl;

$-(CH_2)_n{}^{13}-C(O)-R^{13a}$, n^{13} is 0 or 1, and R^{13a} is C_{1-6}alkyl, C_{1-2}fluoroalkyl, C_{3-6}cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, benzyl, or phenyl (wherein the phenyl and

benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, C_{1-2}alkyl, C_1fluoroalkyl, C_{1-2}alkoxy or C_1fluoroalkoxy);

$-(CH_2)_n{}^{14}$-Het^1, -CH(Me)-Het^1, or $-CMe_2$-Het^1, wherein n^{14} is 0 or 1, and Het^1 is 4-, 5- or 6-membered heterocyclic ring, and R^{14} is C_{1-4}alkyl, $C(O)R^{19}$ or $S(O)_2R^{19}$ wherein R^{19} is C_{1-4}alkyl, C_{3-6}cycloalkyl, 2-thienyl, furan-2-yl, phenyl (unsubstituted) or benzyl (unsubstituted);

or

$-(CH_2)_n{}^{10}$-Ar wherein n^{10} is 0 or 1.

39. (currently amended). A compound or salt as claimed in ~~any preceding~~ claim 1, which is:

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-(5-methyl-1,3,4-thiadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-thiadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-thiadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-N-(4-fluorophenyl)-5-(3-methyl-1,2,4-oxadiazol-5-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-5-(1,3-dimethyl-1H-1,2,4-triazol-5-yl)-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclopentyl~~cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-N-isobutyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-N-isobutyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-cyclohexyl-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-[(1R)-1,2-dimethylpropyl]-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-[(1S)-1,2-dimethylpropyl]-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Tert-butyl~~tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Tert-butyl~~tert-butyl-1,3,4-oxadiazol-2-yl)-N-cyclohexyl-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Tert-butyl~~tert-butyl-1,3,4-oxadiazol-2-yl)-N-cyclopentyl-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Tert-butyl~~tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-isobutyl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Tert-butyl~~tert-butyl-1,3,4-oxadiazol-2-yl)-N-[(1S)-1,2-dimethylpropyl]-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Tert-butyl~~tert-butyl-1,3,4-oxadiazol-2-yl)-N-[(1R)-1,2-dimethylpropyl]-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-~~Cyclohexyl~~cyclohexyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl -N-isobutyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-[(1S)-1,2-dimethylpropyl]-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-[(1R)-1,2-dimethylpropyl]-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[3-(methoxymethyl)-1,2,4-oxadiazol-5-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-{3-[(~~Dimethylamino~~dimethylamino)methyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[3-(morpholin-4-ylmethyl)-1,2,4-oxadiazol-5-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Cyclopropyl~~cyclopropyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-(1-~~Acetyl~~acetylpiperidin-4-yl)-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(3-methyloxetan-3-yl)-1,3,4-oxadiazol-2-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[(4-methylpiperazin-1-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-isopropyl-1,3,4-oxadiazole-2-carboxamide,

4-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-1-methylpyrrolidin-2-one,

1-~~Ethyl~~ethyl-N-tetrahydro-2H-pyran-4-yl-5-(5-tetrahydro-2H-pyran-4-yl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(morpholin-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-[5-(~~Tert-butoxymethyl~~tert-butoxymethyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine, or

methyl 2-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3-oxazole-4-carboxylate;

or a salt thereof.

40. (currently amended) A compound or salt as claimed in ~~any of~~ ~~claims~~ claim 1 ~~to 38~~, which is:

~~Methyl~~methyl 2-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-4,5-dihydro-1,3-oxazole-4-carboxylate,

1-~~Ethyl~~ethyl-5-(4-methyl-4,5-dihydro-1,3-oxazol-2-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-(n-~~Propyl~~propyl)-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(tetrahydrofuran-2-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(dimethylamino)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(5-methyl-1,2,4-triazol-3-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-(1-~~Acetyl~~acetylpiperidin-4-yl)-1-ethyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine, or

N-(1-~~Acetyl~~acetylpiperidin-4-yl)-1-ethyl-5-[3-(morpholin-4-ylmethyl)-1,2,4-oxadiazol-5-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine;

or a salt thereof.

41. (currently amended) A compound or salt as claimed in ~~any of claims~~ claim 1 ~~to 38~~, which is:

1-~~Ethyl~~ethyl-5-[(4R)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[(4S)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[(4S)-4-(phenylmethyl)-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[(4R)-4-(phenylmethyl)-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[(4S,5R)-5-methyl-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[(5R)-5-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[(5S)-5-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(4,4-~~Dimethyl~~dimethyl-4,5-dihydro-1,3-oxazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxylic acid,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(1-methylethyl)-1,3-oxazole-4-carboxamide,

1-~~Ethyl~~ethyl-5-[4-(4-morpholinylcarbonyl)-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-N-methyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

trans-4-{[1-~~Ethyl~~ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl]amino}cyclohexanol,

1-~~Ethyl~~ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-3-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

4-{[1-~~Ethyl~~ethyl -5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl]amino}cyclohexanone,

1-~~Ethyl~~ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-n-propyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-[5-(1,1-~~Dimethylethyl~~dimethylethyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-6-methyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-6-methyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-yl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-(5-~~Cyclobutyl~~ cyclobutyl -1,3,4-oxadiazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-2-pyrrolidinone,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)acetamide,

1-~~Ethyl~~ethyl-5-[5-(1-methyl-2-piperidinyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[(4-methyl-1,2,5-oxadiazol-3-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

3-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}cyclopentanone,

1-~~Ethyl~~ethyl-5-[5-(tetrahydro-3-furanyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

(4S)-4-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-1,3-thiazolidin-2-one,

5-[5-(2,2-~~Dimethylcyclopropyl~~dimethylcyclopropyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)-N-methylacetamide,

1-~~Ethyl~~ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(1-methylcyclobutyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(3-methyl-5-isoxazolyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(1-methyl-1H-pyrazol-5-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-[5-(1-~~Acetyl~~acetyl -4-piperidinyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[(4-methyl-1-piperazinyl)methyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl -5-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine, or

1-~~Ethyl~~ethyl-5-{3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine;

or a salt thereof.

42. (currently amended) A compound or salt as claimed in ~~any of claims~~ claim 1 ~~to 38~~, which is:

2-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-phenylacetamide,

2-{5-[1-~~Ethyl~~ethyl -4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-(1-phenylethyl)acetamide,

1-~~Ethyl~~ethyl-5-{3-[2-oxo-2-(1-piperidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

2-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-(phenylmethyl)acetamide,

2-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*,*N*-dimethylacetamide,

N-~~Ethyl~~ethyl-2-{5-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}acetamide,

1-~~Ethyl~~ethyl-5-{3-[1-(4-morpholinyl)ethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-[3-(~~Cyclohexyl~~cyclohexylmethyl)-1,2,4-oxadiazol-5-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[2-oxo-2-(1-piperidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-ethyl-5-{3-[2-(4-methyl-1-piperazinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[5-(1*H*-1,2,3-triazol-1-ylmethyl)-1,3,4-oxadiazol-2-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-{5-[(2,4-~~Dimethyl~~dimethyl-1,3-thiazol-5-yl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(2-furanylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(3-isoxazolylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-ethyl-5-(5-{[4-(methyloxy)phenyl]methyl}-1,3,4-oxadiazol-2-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[5-(1*H*-tetrazol-1-ylmethyl)-1,3,4-oxadiazol-2-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(5-isothiazolylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[(3-methyl-5-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-(5-{[4-(~~Dimethylamino~~dimethylamino)phenyl]methyl}-1,3,4-oxadiazol-2-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine (1:1),

1-~~Ethyl~~ethyl-5-{5-[(2-methyl-1,3-thiazol-4-yl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

2-[1-({5-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)cyclopentyl]-*N*-methylacetamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)cyclopropanecarboxamide,

1-~~Ethyl~~ethyl-5-{5-[(5-methyl-3-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[(5-methyl-3-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[2-(4-methyl-1,3-thiazol-5-yl)ethyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-{5-[(3,5-~~Dimethyl~~dimethyl -4-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

N-(1-{5-[1-~~Ethyl~~ethyl -4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}ethyl)acetamide,

5-{5-[(1-acetyl-4-piperidinyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{5-[(4-methylphenyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[5-(4-methylphenyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-[5-(3,4-~~Dimethylphenyl~~dimethylphenyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-[5-(2,4-~~Dimethylphenyl~~dimethylphenyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-{5-[(4-~~Bromophenyl~~bromophenyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-*N*-(phenylmethyl)-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-{[4-(methyloxy)phenyl]methyl}-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(2-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(4-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(3-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,

N-[(4-~~Chlorophenyl~~chlorophenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

N-[(2,3-~~Dimethylphenyl~~dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

N-[(3,5-~~Dimethylphenyl~~dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

N-[(3,4-~~Dimethylphenyl~~dimethylphenyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(1-phenylethyl)-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl -4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-{(1R)-1-[4-(methyloxy)phenyl]ethyl}-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(1R)-1-phenylpropyl]-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(4-methylphenyl)-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-({4-[(methylsulfonyl)amino]phenyl}methyl)-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-{[4-(methylsulfonyl)phenyl]methyl}-1,3-oxazole-4-carboxamide,

N-(1-Acetyl-4-piperidinyl)-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(tetrahydro-2H-pyran-4-yl)-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(tetrahydro-2-furanylmethyl)-1,3-oxazole-4-carboxamide,

2-[1-~~Ethyl~~ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[2-(4-methyl-1-piperazinyl)ethyl]-1,3-oxazole-4-carboxamide,

N-[1-(~~Aminomethyl~~aminomethyl)cyclohexyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-methyl-1,3-oxazole-4-carboxamide,

N-(2,6-~~Dimethylphenyl~~dimethylphenyl)-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

N-{[4-(~~Aminocarbonyl~~aminocarbonyl)phenyl]methyl}-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,

2-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)acetamide,

5-{3-[2-(2,6-~~Dimethyl~~dimethyl -4-morpholinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[2-(4-methyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

2-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-[1-methyl-2-(methyloxy)ethyl]acetamide,

5-{3-[2-(3,5-~~Dimethyl~~dimethyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[2-(3-methyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

2-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-3-pyridinylacetamide,

6-{5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-2-piperidinone,

1-~~Ethyl~~ethyl -5-{5-[(3-methyl-1*H*-1,2,4-triazol-5-yl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)acetamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)benzamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-phenylacetamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-methylpropanamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-3-methylbutanamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)cyclohexanecarboxamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-furancarboxamide,

N-({5-[1-~~Ethyl~~ethyl -4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)methanesulfonamide,

N-({5-[1-~~Ethyl~~ethyl -4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)benzenesulfonamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-1-phenylmethanesulfonamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-propanesulfonamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-1-propanesulfonamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)cyclopropanesulfonamide,

N-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-thiophenesulfonamide,

1-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-pyrrolidinone,

1-({5-[1-~~Ethyl~~ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-piperidinone,

5-{3-[(1-~~Acetyl~~acetyl-4-piperidinyl)methyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(3-{[1-(3-methylbutanoyl)-4-piperidinyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(3-{[1-(methylsulfonyl)-4-piperidinyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[1-(phenylsulfonyl)cyclopropyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[3-(phenylmethyl)-1,2,4-oxadiazol-5-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-[3-(1-phenylethyl)-1,2,4-oxadiazol-5-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(3-{[4-(methyloxy)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-(3-{[4-(~~Dimethylamino~~dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-(3-{[3-(~~Dimethylamino~~dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-(3-{[4-(~~Dimethylamino~~dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[(phenyloxy)methyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[3-(5,6,7,8-tetrahydro[1,2,4]triazolo[4,3-*a*]pyridin-3-ylmethyl)-1,2,4-oxadiazol-5-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-{3-[(4-phenyl-1-piperazinyl)methyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(5-ethyl-1,2,4-oxadiazol-3-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

5-(5-{[4-(~~Dimethylamino~~dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-3-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-~~Ethyl~~ethyl-5-(5-{[4-(methyloxy)phenyl]methyl}-1,2,4-oxadiazol-3-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine, or

5-(3,8-~~Dioxa~~dioxa-1-azaspiro[4.5]dec-1-en-2-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine;

or a salt thereof.

43. (currently amended) A compound or salt as claimed in ~~any of claims~~ claim 1 ~~to 38~~, which is:

1-~~Ethyl~~ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 14),

5-(5-~~Tert~~tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 17),

1-~~Ethyl~~ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 23),

1-~~Ethyl~~ethyl-5-[5-(3-methyloxetan-3-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 34),

1-~~Ethyl~~ethyl-5-{5-[(4-methylpiperazin-1-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-~~Ethyl~~ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-yl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine, also named: 1-ethyl-5-[5-(morpholin-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 39),

1-~~Ethyl~~ethyl-5-[5-(tetrahydrofuran-2-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 44),

1-~~Ethyl~~ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 77), or

1-~~Ethyl~~ethyl5-{3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 84);

or a salt thereof.

44. – 47. (cancelled)

48 (currently amended) A pharmaceutical composition comprising a compound of formula (I) ~~or (IA)~~, as defined in ~~any of claims~~ claim 1 ~~to 46~~, or a pharmaceutically acceptable salt thereof, and one or more pharmaceutically acceptable carriers and/or excipients.

49. (cancelled).

50. (original) A pharmaceutical composition as claimed in claim 48 which is suitable for and/or adapted for oral administration.

51 – 52 (cancelled)

53. (currently amended) A method of treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a neurological disorder in a mammal such as a human in need thereof, which method comprises administering to the mammal a therapeutically effective amount of a compound of formula (I) ~~or (IA)~~, as defined in ~~any of claims~~ claim 1 ~~to 46~~, or a pharmaceutically acceptable salt thereof.

54. (currently amended) A ~~composition, or the use or a~~ method as claimed in claim 53, wherein the ~~composition or medicament or~~ method is for the treatment and/or prophylaxis of chronic obstructive pulmonary disease (COPD), asthma, rheumatoid arthritis ~~or~~, allergic rhinitis or atopic dermatitis in ~~a mammal such as~~ a human.

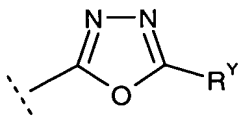
55. (currently amended) A ~~composition, the use or a~~ method as claimed in claim 54, wherein the ~~composition or medicament or~~ method is for the treatment and/or prophylaxis of chronic obstructive pulmonary disease (COPD) in ~~a mammal such as~~ a human.

57. (currently amended) A ~~composition, the use or a~~ method as claimed in ~~any of claims 51 to 56~~ claim 55, ~~wherein the composition or medicament is for oral administration and is a pharmaceutical composition as defined in claim 50, or~~ wherein the method comprises oral administration to the mammal of a pharmaceutical composition suitable for oral administration ~~and as defined in claim 50~~.

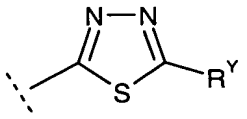
58. (new) A compound or salt as claimed in claim 24, wherein R^1 is ethyl.

59 (new) A compound or salt as claimed in claim 28, wherein R^1 is ethyl.

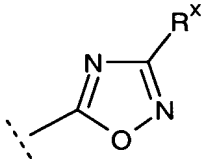
60. (new) A compound or salt as claimed in claim 24, wherein Het is of sub-formula (ia), (ib), (ic), or (id):



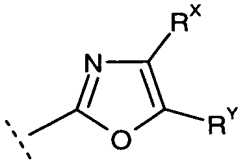
(ia)



(ib)



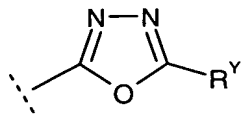
(ic)



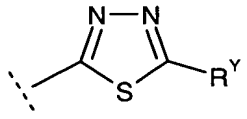
(id)

61. (new) A compound or salt as claimed in claim 60 wherein wherein R^1 is ethyl.

62. (new) A compound or salt as claimed in claim 28, wherein Het is of sub-formula (ia), (ib), (ic), or (id):



(ia)



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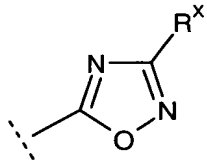

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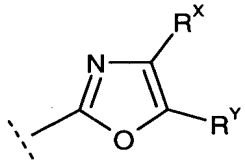

(id)

63. (new) A compound or salt as claimed in claim 62, wherein wherein R^1 is ethyl.